

Appl. No.: 10/691,368

Amdt. Dated: 06/30/2006

Reply to Office Action Mailed: 04/07/2006

REMARKS

In the Office Action, claims 1-9 were allowed and claims 10-30 were rejected. To place the application in better form for allowance, claims 10, 12, 17, 19, and 21 have been amended, and claims 25-30 have been cancelled without prejudice or disclaimer. Applicant respectfully requests consideration in view of the above amendments and/or in view of the reasons set forth below.

Allowable Subject Matter

Applicant appreciates the indication that claims 1-9 are allowed, but respectfully asserts that patentability is not limited to the reasons stated by the Examiner on page 7 of the Office Action. The stated reasons for patentability are respectfully objected to because they misquote and mischaracterize the steps of claim 1 and fail to address any of the recitations of claims 2-9. In particular, claim 1's recitation of "contacting the tube with boron to react the magnesium with the boron to form superconducting magnesium diboride" was incorrectly summarized as "the critical step of contacting the tube with boron." Applicant respectfully objects to the description of this method step as "critical" because Applicant has not indicated (in the application or otherwise) that this particular method step is any more important than any other claimed method step. Claims 1-9 are allowable over the applied references not merely for the reasons listed by the Examiner, but rather for a feature or combination of features recited therein.

Claim 13 was objected to as being dependent on a rejected base claim. The Examiner indicated that claim 13 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 10 (the only claim from which claim 13 had depended) has been amended to include the recitations of claim 13. Therefore, Applicant respectfully submits that currently amended claim 10 and claims 11-12, 14-16 depending therefrom are now allowable over the applied references.

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Claim 17 has been amended to recite method steps that are supported by the specification at page 14, second paragraph, and that are not disclosed in any of the applied references. These method steps are:

heating an exposed first end of a first superconducting wire having a first metal matrix;

heating an exposed second end of a second superconducting wire having a second metal matrix, wherein the superconducting wires each comprise a superconducting filament having a superconducting composition comprising magnesium diboride; and

joining the heated first exposed end of the first superconducting wire with the heated second exposed end of the second superconducting wire at a point to form a joint, wherein the superconducting filaments having the superconducting composition are in continuous electrical contact with each other after the formation of the joint.

Therefore, Applicant respectfully submits that currently amended claim 17 and claims 18-24 depending therefrom are now allowable over the applied references.

35 U.S.C. 102 and 35 U.S.C. 103 Rejections

Claims 10-12, 14, 16, and 25-26 were rejected under 35 U.S.C. 102(a) as being anticipated by Nakai, et al. (JP 20002-324445). This rejection is moot in view of the amendments made to claim 10.

Claims 17-23 and 27 were rejected under 35 U.S.C. 102(a) as being anticipated by Miyoshi (JP 2003-086265). Claims 17, 19, 21-23, 25, 27-28 were rejected under 35 U.S.C. 102(a/e) as being anticipated by Morita, et al. (US 2003/0051901). These rejections are moot in view of the amendments made to claim 17.

Claims 10, 12, 15-16, 25-26, and 28-29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Giovanni (Conference SATT11, Vitetri SM(SA) Italy, 2002, March 19-22,

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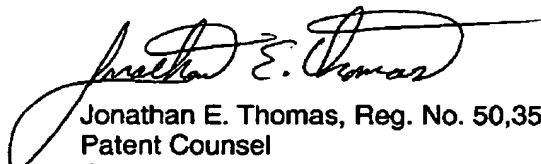
Page 8). Claims 15 and 29 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nakai, et al. (JP2002-324445). Claims 18, 20, and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over Morita, et al. (US 2003/0051901). These rejections are moot in view of the amendments made to independent claims 10 and 17.

Summary

Thus, Applicant respectfully submits that claim 1, claims 2-9 depending therefrom; claim 10, claims 11, 12, 14-16 depending therefrom; claim 17, and claims 18-24 depending therefrom are allowable over the applied references, and respectfully request that a timely Notice of Allowance be issued in this case.

Should the Examiner believe that anything further is needed to place the application in condition for allowance, the Examiner is requested to contact Applicant's undersigned representative at the telephone number listed below.

Respectfully submitted,



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